PESHKIN ET AL. — 09/781,686
Client/Matter: 007448-0303839

CLAIMS:

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1.   (Currently Amended) A multi-function hub for use in an <u>intelligent</u> assist system, <u>the multi-function hub</u> comprising:

a physical interface configured and arranged to be a central interface point for an operator;

a computational node disposed on the physical interface, the computational node comprising programmable logic for implementing program controlled functions; and

an input/output ("I/O") interface <u>for interfacing with an information network and</u> disposed on the physical interface, the I/O interface being adapted to communicate with the computational node <u>on the physical interface, and at least one computational node disposed</u> <u>on at least one other module within the intelligent assist system,</u> and a plurality of other computational nodes, wherein the I/O interface communicates with the <u>computational node</u> <u>disposed on the other module</u> plurality of other computational nodes via a common data link, and the I/O interface uses a digital communication protocol to communicate with the <u>computational node on the other module</u> plurality of other computational nodes via the common data link.

2.   (Original) The hub of claim 1 wherein the programmable logic implements input/output communication functions.

3.   (Original) The hub of claim 1 wherein the programmable logic implements motion control algorithms.

4.   (Original) The hub of claim 1 wherein the I/O interface provides communication to a plurality of sensors.

5.   (Original) The hub of claim 1 wherein the I/O interface provides input from an intent sensor.

6.   (Original) The hub of claim 1 wherein the I/O interface provides control outputs to actuators.

7.   (Original) The hub of claim 1 further comprising an electrical interface to

provide electrical power to a tooling.

8.   (Previously Presented) The hub of claim 1 further comprising a pneumatic interface to provide pneumatic power to a tooling.

9.   (Previously Presented) The hub of claim 1 further comprising:
at least one user operable control accessible from the outside of the hub.

10.   (Previously Presented) The hub of claim 1 further comprising:
a user interface connectable to an external computer or a PDA.

11.   (Original) The hub of claim 1 further comprising:
a network interface in communication with a local area network.

12.   (Original) The hub of claim 1 further comprising:
a network interface in communication with an information network.

13.   (Original) The hub of claim 1 further comprising:
a network interface in communication with an Internet.

14.   (Original) The hub of claim 1 further comprising:
a load cell for determining the weight of a payload suspended from the multi-function hub.

15.   (Original) The hub of claim 1 further comprising:
a strain gauge for determining the weight of a payload suspended from the multi-function hub.

16.   (Original) The hub of claim 1 further comprising:
a flexure for determining the weight of a payload suspended from the multi-function hub.

17.   (Previously Presented) The hub of claim 1 further comprising:
user programmable switches.

18.   (Original) The hub of claim 1 further comprising:
a user display.

19.   (Original) The hub of claim 1 further comprising:
a personal digital assistant.

20.   (Original) The hub of claim 1 wherein the physical interface comprises a
swivel.

21.   (Previously Presented) The hub of claim 1 further comprising an intent sensor
to indicate a user's intent to move the payload.

22.   (Previously Presented) The hub of claim 21 wherein the intent sensor is
mechanically fastened to the physical interface.

23.   (Original) The hub of claim 21 wherein the intent sensor comprises an inline
handle.

24.   (Original) The hub of claim 23 wherein the inline handle comprises a grip.

25.   (Previously Presented) The hub of claim 23 wherein the inline handle
descends from the hub.

26.   (Original) The hub of claim 21 wherein the intent sensor comprises a slidable
collar.

27.   (Original) The hub of claim 21 wherein the intent sensor comprises a spring
return.

28.   (Original) The hub of claim 21 wherein the intent sensor comprises a hall-

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effect proportional control.

     29.   (Original) The hub of claim 21 wherein the intent sensor comprises user operable controls.

     30.   (Previously Presented) The hub of claim 29 wherein the user operable controls are programmable.

     31.   (Original) The hub of claim 21 wherein the intent sensor comprises a threaded mechanical connection.

     32.   (Canceled).

     33.   (Previously Presented) The hub of claim 1, wherein the digital communication protocol is a Controller Area Network (CAN) protocol.

     34.   (Previously Presented) The hub of claim 1, wherein the digital communication protocol is a local area network protocol.

     35.   (Previously Presented) The hub of claim 1, wherein the digital communication protocol is an Ethernet protocol.

     36.   (Previously Presented) The hub of claim 1, wherein the common data link is a bus.

     37.   (Previously Presented) The hub of claim 1, wherein the common data link is a wireless data link.

     38.   (Currently Amended) The hub of claim 1, wherein the I/O interface uses packet-based communications to communicate with the <u>computational node on the other module</u> plurality of other computational nodes via the common data link.

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39.   (Previously Presented) The hub of claim 1, wherein the physical interface
provides mechanical support within the assist system.

40.   (New) The hub of claim 1, wherein the at least one other module comprises a
trolley.

41.   (New) The hub of claim 1, wherein the at least one other module comprises a
lift.

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